

Carbonated Beverage Inspection Association, published by Beverage Japan Inc., and published June 25, 1999. The documents themselves are in Japanese and English translations of relevant portions of these documents are provided.

During previous examination applicants have submitted a declaration on behalf of the senior inventor Mr. Yokoo made December 9, 2005. The examiner has responded to this submission with further comments and in particular the observations noted on page 2, item 1, first paragraph of the current Official Action. Applicants now address the examiner's comments in this passage in particular and in the Official Action in general with the following comments, observations, relevant background literature material (as noted above) and a further declaration from Mr. Yokoo made August 16, 2006.

To again clarify the difference between UF and MF, the pore size of a UF membrane is smaller than that of MF, thus a UF membrane will filter more finely than an MF membrane. Consequently, as a necessary result of using UF membrane, a turbidity of the filtrate will be lower than using an MF membrane. Typically, MF is used to remove insoluble solid components, while UF is used to fractionate molecules of soluble components by molecular size (i.e. molecular weight cutoff; *see* column 7, line 66 in Chen et al).

Taking these characteristics of UF and MF into account, it is evident that the turbidity of the product of Chen et al, i.e. mango juice produced via UF, is less than 6.3 NTU of MF.

The passage relating to filter pore size (Chen et al, column 8, line 1), which is pointed out by the examiner, describes a UF membrane suitable for Chen's methods. Although it is stated that the pore size is "sufficiently large for soluble color components to pass through the membrane", the size can be understood to be within the range which can be worked as UF. The description does not mean at all that the pore size of the UF membrane is large enough to pass insoluble solid components that will increase the turbidity of filtrate. The soluble color components cannot increase the turbidity of the filtrate solution, as they are dissolved in the solution.

In addition, Chen et al also states that the pore size also "sufficiently small enough to retain pectin other suspended solids and microbes as needed for permeate clarification" in the paragraph following to the description. Taking this into account, it is evident that the product of

Chen et al is significantly different from the mango juice of the present invention which contains a large quantity of insoluble solid components, thus has a turbidity above 2000 NTU.

Applicants also wish to be certain the concepts of color and turbidity are correctly understood.

Based on the attached declaration as well as the above comments it will be clear that increased color does not mean increased turbidity.

Turning next to the attached evidence, in the experiments shown in the declaration, the inventor prepared mango juice via ultrafiltration (UF) and the turbidity of the mango juice was measured to be 5.80 NTU. From this information as well as the entire content of the record of this application, it will be evident that the turbidity of mango juice produced via ultrafiltration, namely the product of Chen et al, falls far short of the above 2000 NTU value required by applicants' claims.

Reconsideration of this application and allowance of all claims are solicited. Should the examiner require further information, please contact the undersigned.

A Notice of Appeal will be filed in order to maintain pendency of the application and to permit ample time for this response and attached evidence and documentation to be fully and carefully considered.

Respectfully submitted,

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By: _____



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